

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 2 and 6 are requested to be cancelled.

Claims 1, 3, 4, 7, 13, 16 and 17 are currently being amended. The amendments to claims 3 and 4 are only to change their dependency to claim 1. Support for the amendments to claims 1, 7, 13 and 16 can be found at least in original claims 2 and 6.

This amendment changes and deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1, 3-5 and 7-18 are now pending in this application.

Allowable subject matter

Applicant appreciates the indication that claims 12, 14-15 and 18 are allowed.

Rejections under 35 U.S.C. §§ 102 and 103

Claims 1-3, 6-9, 11, 13 and 16-17 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 2002259921 to Komatsu et al. ("Komatsu"). Claims 4-5 and 10 were rejected under 35 U.S.C. § 103(a) as being obvious over Komatsu in view of U.S. Patent 4,718,117 to Ma et al. ("Ma"). Applicant respectfully traverses these rejections for at least the following reasons.

Independent claim 1 has been amended to clarify that the "controllable capacitance element is set to have a first capacitance corresponding to a binary 'one' and a second capacitance corresponding to a binary 'zero' for data to be transmitted to the reader." Thus in claim 1 the capacitance of the capacitance element may be controlled to correspond to a

binary “1” or “0” for data to be transmitted to the reader. Komatsu and Ma fail to suggest at least this feature of claim 1.

In contrast to claim 1, Komatsu does not disclose a controllable capacitance element which is set to have a first capacitance corresponding to a binary “one” and a second capacitance corresponding to a binary “zero” for data to be transmitted to its reader. Komatsu discloses an ID tag having a resonant circuit 15 with a number of capacitors 14 which may be connected in parallel through respective switches 13. In contrast to the controllable capacitance element of claim 1, however, Komatsu does not disclose its resonant circuit 15 to have capacitances corresponding to a binary “one” and “zero” for data to be transmitted to its reader 4.

The control and purpose of the resonant circuit 15 of the Komatsu device is to vary the capacitance such that the voltage E of the smoothing circuit 17 can be controlled to be between upper and lower limits V_H and V_L, respectively. This control solves the problem occurring when a number of articles 1 each having ID tags 2 and inductance coils 3 are piled up and one of the ID tags is read by a reader, due to the mutual inductance between coils. Nowhere does Komatsu suggest that its resonant circuit 15 is structured to have capacitances corresponding to binary ones and zeros for data transmission to its reader.

The Office Action cites to paragraph [0024] of Komatsu as disclosing the features of original claim 6, which have been incorporated into claim 1 and describes Komatsu as disclosing “switches 13 receiving 0 or 1 (par. 0024, “1” for default or close) are controlled by CPU 16 to provide at least the first and second capacitances to the resonant circuit and subsequently provide the variable resonant frequency.” The “1” in paragraph [0024] of Komatsu, however, does not refer to a binary one of data to be transmitted, but instead refers an increment of 1 added to the variable C, which is the number of capacitors 14 which are switched so as to be connected in parallel in circuit 15.

Ma was cited for disclosing details of a varactor diode, but fails to cure the deficiencies of Komatsu.

Independent claims 7, 13 and 16 have been amended to include features corresponding to the “controllable capacitance element is set to have a first capacitance corresponding to a binary ‘one’ and a second capacitance corresponding to a binary ‘zero’ for data to be transmitted to the reader” in claim 1, and thus are patentable for analogous reasons.

The dependent claims are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date

February 21, 2006

By

Thomas G. Bilodeau

FOLEY & LARDNER LLP
Customer Number: 22879
Telephone: (202) 672-5485
Facsimile: (202) 672-5399

William T. Ellis
Attorney for Applicant
Registration No. 26,874

Thomas G. Bilodeau
Attorney for Applicant
Registration No. 43,438